

-32-

**METHOD AND APPARATUS FOR IMPARTING CURVES  
IN IMPLANTABLE ELONGATED MEDICAL INSTRUMENTS**

ABSTRACT OF THE DISCLOSURE

5           Elongated medical instruments adapted to be permanently or  
temporarily implanted in the mammalian body or used to access a site in the  
body to facilitate introduction of a further medical device, and methods and  
apparatus for deflecting the distal end and imparting curves in distal segments  
10 of such medical instruments within the body by manipulation of a proximal  
segment of the instrument outside the body are disclosed. Multiple portions  
of distal segments of a single one or distal segments of coaxially arranged  
distal segments of deflectable coiled wires are formed each having a line of  
spacers each functioning as a backbone along a side of the wire coil and  
15 formed in a variety of ways. One or more elongated movable wire extends  
through a coil lumen to one or more attachment point distal to each portion  
that can be pushed to widen and/or pulled to narrow the spacing of coil turns  
across the coil diameter from the line to induce a bend in all more proximal  
portions.